## **CLAIMS**

- 1. An engineered carbonaceous material comprising a mixture of synthetic graphite and one or more graphite materials selected from the group consisting of natural flake graphite, natural vein graphite, and amorphous graphite.
- 2. An engineered carbonaceous material comprising a mixture of expanded graphite and one or more graphite materials selected from the group consisting of natural flake graphite, natural vein graphite, amorphous graphite, and synthetic graphite.
- 3. The material of Claim 1 were in the mixture comprises between 0.1 and 99.9 wt. % synthetic graphite.
- 4. The material of Claim 2 were in the mixture comprises between 0.1 and 99.9 wt. % expanded graphite.
- 5. The material of Claim 1 further comprising 0.01 to 20.0 wt. % MnO<sub>2</sub>.
- 6. The material of Claim 2 further comprising 0.01 to 20.0 wt. % MnO<sub>2</sub>.
- 7. The material of Claim 1 further comprising 0.01 to 20.0 wt. % of a conductive electrode active material.

- 8. The material of Claim 2 further comprising 0.01 to 20.0 wt. % of a conductive electrode active material.
- 9. The material of Claim 1 wherein the graphite has a particle size between 3 micrometers and 90 micrometers.
- 10. The material of Claim 2 wherein the graphite has a particle size between 3 micrometers and 90 micrometers.
- 11. The material of Claim 1 wherein the graphite as a purity of between 90.0 and 99.9 % LOI.
- 12. The material of Claim 2 wherein the graphite as a purity of between 90.0 and 99.9 % LOI.
- 13. A method of making a material according to Claim 1 comprising co-grinding the graphite components.
- 14. The method of making a material according to Claim 1 comprising co-blending the graphite components.
- 15. The method of making a material according to Claim 2 comprising co-grinding the graph components.

- 16. The method of making a material according to Claim 2 comprising co-blending the graphite components.
- 17. The method of making a material according to Claim 5 comprising co-grinding the graphite materials.
- 18. The method of making a material according to Claim 5 comprising co-blending the graphite materials.
- 19. An electrochemical cell having an electrolyte, a negative electrode and a positive electrode, the positive electrode comprising a mixture including a carbonaceous material as set forth in Claim 1.
- 20. An electrochemical cell having an electrolyte, a negative electrode and a positive electrode, the positive electrode comprising a mixture including a carbonaceous material as set forth in Claim 2.
- 21. An electrochemical cell having an electrolyte, a negative electrode and a positive electrode, the positive electrode comprising a mixture including a carbonaceous material as set forth in Claim 5.